## **Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Original) A compound of formula (I)

$$Ar - CHCH_2NHCR^3R^4(CH_2)_m - O - (CH_2)_n$$

$$OH$$

$$(CR^aR^b)_x S(O)_z$$

$$(CR^aR^b)_y (CR^aR^b)_y (CR^$$

or a salt, solvate, or physiologically functional derivative thereof, wherein:

m is an integer of from 2 to 8;
n is an integer of from 3 to 11;
with the proviso that m + n is 5 to 19;
x is zero and y is an integer of 2 or 3 or
y is zero and x is an integer of 2 or 3;
z is zero or an integer of 1 or 2;

R<sup>a</sup> and R<sup>b</sup> are independently selected from hydrogen and C<sub>1-4</sub>alkyl;

 $R^1$  and  $R^2$  are independently selected from hydrogen,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkoxy, halo, phenyl, and  $C_{1-6}$ haloalkyl;

R<sup>3</sup> and R<sup>4</sup> are independently selected from hydrogen and C<sub>1-4</sub>alkyl with the proviso that the total number of carbon atoms in R<sup>3</sup> and R<sup>4</sup> is not more than 4:

# Ar is a group selected from

$$R^6$$
 $R^7$ 
 $R^8$ 
 $R^8$ 

wherein R<sup>6</sup> represents hydrogen, halogen, -(CH<sub>2</sub>)<sub>q</sub>OR<sup>9</sup>, -NR<sup>9</sup>C(O)R<sup>10</sup>, -NR<sup>9</sup>SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>9</sup>R<sup>10</sup>, -NR<sup>9</sup>R<sup>10</sup>, -OC(O)R<sup>11</sup> or -OC(O)NR<sup>9</sup>R<sup>10</sup>,

and R<sup>5</sup> represents hydrogen, halogen or C<sub>1-4</sub>alkyl;

or R<sup>6</sup> represents –NHR<sup>12</sup> and R<sup>5</sup> and –NHR<sup>12</sup> together form a 5- or 6-membered heterocyclic ring;

R<sup>7</sup> represents hydrogen, halogen, –OR<sup>9</sup> or –NR<sup>9</sup>R<sup>10</sup>;

R<sup>8</sup> represents hydrogen, halogen, haloC<sub>1-4</sub> alkyl, -OR<sup>9</sup>, -NR<sup>9</sup>R<sup>10</sup>, -OC(O)R<sup>11</sup> or -OC(O)NR<sup>9</sup>R<sup>10</sup>;

R<sup>9</sup> and R<sup>10</sup> independently represent hydrogen or C<sub>1-4</sub> alkyl or R<sup>9</sup> and R<sup>10</sup> together with the nitrogen atom to which they are attached form a 5-, 6- or 7-membered nitrogen-containing ring,

R<sup>11</sup> represents an aryl (eg phenyl or naphthyl) group which may be unsubstituted or substituted by one or more substituents selected from halogen, C<sub>1-4</sub> alkyl,

hydroxy, C<sub>1-4</sub> alkoxy or halo C<sub>1-4</sub> alkyl; and

q is zero or an integer from 1 to 4.

- 2. (Original) A compound according to claim 1 wherein  ${\sf R}^3$  and  ${\sf R}^4$  are independently selected from hydrogen and methyl.
- 3. (Currently Amended) A compound according to claim 1 er claim 2 wherein  $\mathbb{R}^1$  and  $\mathbb{R}^2$  each represent hydrogen.
- 4. (Currently Amended) A compound according to <u>claim 1</u> any of claims 1 to 3 wherein the integer m is 4, 5 or 6 and n is 3, 4, 5 or 6.
- 5. (Currently Amended) A compound according to claim 1 any of claims

  1 to 4 wherein the group Ar is selected from groups (a) and (b).

$$R^6$$
 $R^8$ 
 $R^8$ 
 $R^8$ 
 $R^8$ 
 $R^8$ 
 $R^8$ 
 $R^8$ 

6. (Currently Amended) A compound according to claim 5 wherein groups (a) and (b) are selected from the group consisting of following groups (i) to (xxi):

$$H_2NSO_2NH$$
 $H_2NSO_2$ 
 $H_2NSO_$ 

$$(p-CH_3)C_6H_4CO + CC_6H_4(p-CH_3) + CC_6H_5(p-CH_3) + CC_6H_5(p$$

7. (Currently Amended) A compound of formula (I) according to any of claim 6 wherein Ar represents group (i).

- 8. (Currently Amended) A compound of formula (I) according to <u>claim 1</u> any of claims 1 7 wherein z represents 2.
- 9. (Currently Amended) A compound of formula (I) according to claim 1 which is selected from the group consisting of:
  4-[(1R)-2-({6-[4-(1,1-Dioxido-2,3-dihydro-1-benzothien-6-yl)butoxy]hexyl}amino)-1-hydroxyethyl]-2-(hydroxymethyl)phenol;
  4-[(1r)-2-({6-[4-(1,1-dioxido-3,4-dihydro-2h-thiochromen-7-yl)butoxy]hexyl}amino)-1-hydroxyethyl]-2-(hydroxymethyl)phenol;

and salts thereof, solvates thereof and physiologically functional derivatives thereof.

10. (Currently Amended) A method for the prophylaxis or treatment of a clinical condition in a mammal, such as a human, for which a selective β<sub>2</sub>-adrenoreceptor agonist is indicated, which comprises administration of administration of administration at the trapeutically effective amount of a compound of formula (I), according to claim 1-any of claims 1-9, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof.

#### 11-12. (Canceled)

13. (Currently Amended) A pharmaceutical formulation comprising a compound of formula (I), according to <u>claim 1</u> any of claims 1–9, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof, and a pharmaceutically acceptable carrier or excipient, and optionally one or more other therapeutic ingredients.

## 14. (Canceled)

15. (Currently Amended) A process for the preparation of a compound of formula (I), according to <u>claim 1</u> any of <u>claims 1-9</u>, or a salt, solvate, or physiologically functional derivative thereof, which comprises:

(a) deprotection of <u>deprotecting</u> a protected intermediate, for example of formula (II):

$$Ar^{1} - CHCH_{2}NP^{2}CR^{3}R^{4}(CH_{2})_{m} - O - (CH_{2})_{n} - (CR^{3}R^{b})_{x} S(O)_{z}$$

$$OP^{1}$$

$$R^{2} - (CR^{3}R^{b})_{y} S(O)_{z}$$

$$R^{2} - (CR^{3}R^{b})_{y} S(O)_{z}$$

$$R^{2} - (CR^{3}R^{b})_{y} S(O)_{z}$$

or a salt or solvate thereof, wherein R<sup>a</sup>, R<sup>b</sup>, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, m, n, x, y and z are as defined for the compound of formula (I) or (Ia), Ar<sup>1</sup> represents an optionally protected form of Ar; and P<sup>1</sup> and P<sup>2</sup> are each independently either hydrogen or a protecting group, such that the compound of formula (II) contains at least one protecting group; or

### (b) reacting a compound of formula (IV)

(IV)

wherein Ar<sup>1</sup> is as defined above for formula (II) and P<sup>1</sup> and P<sup>2</sup>, each independently represent hydrogen or a protecting group, with a compound of formula (V):

$$\frac{\mathsf{LCR}^{3}\mathsf{R}^{4}(\mathsf{CH}_{2})_{\mathsf{m}}\mathsf{O}(\mathsf{CH}_{2})_{\mathsf{n}}}{\mathsf{R}^{2}}\mathsf{S(O)_{z}}$$

wherein L is a leaving group such as halo or a sulfonate such as an alkylsulfonate an aryl sulfonate or a haloalkylsulfonate, and  $R^a$ ,  $R^b$ ,  $R^d$ 

-(c) reacting a compound of formula (X):

wherein Ar<sup>1</sup> and P<sup>1</sup> are as hereinbefore defined and L is a leaving group as hereinbefore defined, with an amine of formula (XI):

$$\frac{\text{HNP}^2\text{CR}^3\text{R}^4(\text{CH}_2)_m\text{O}(\text{CH}_2)_n}{\text{P}^2} \frac{\text{CR}^3\text{R}^b)_x}{\text{(CR}^3\text{R}^b)_y}$$
(XI)

wherein  $R^a$ ,  $R^b$ ,  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $P^2$ , m, n, x, y and z are as defined for formula (II);

followed by removal of any protecting groups;

wherein said deprotecting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

- (i) optional removal of removing any protecting groups;
- (ii) optional separation of separating an enantiomer from a mixture of enantiomers;

- (iii) optional conversion of converting one compound of formula
- (I) to a different compound of formula (I); and
- (iv) optional conversion of converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.

16. (New) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises reacting a compound of formula (IV):

wherein Ar<sup>1</sup> represents an optionally protected form of Ar; and P<sup>1</sup> and P<sup>2</sup> each independently represent hydrogen or a protecting group, with a compound of formula (V):

$$LCR^{3}R^{4}(CH_{2})_{m}O(CH_{2})_{n}$$

$$(CR^{8}R^{b})_{x}$$

$$(CR^{8}R^{b})_{y}$$

$$(CR^{8}R^{b})_{y}$$

**(V)** 

wherein L is a leaving group, and R<sup>a</sup>, R<sup>b</sup>, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, n, m, x, y and z are as defined for compounds of formula (I);

wherein said reacting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

- (i) removing any protecting groups;
- (ii) separating an enantiomer from a mixture of enantiomers;

(iii) converting one compound of formula (I) to a different compound of formula (I); and

- (iv) converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.
- 17. (New) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises reacting a compound of formula (X):

wherein Ar<sup>1</sup> represents an optionally protected form of Ar; P<sup>1</sup> independently represents hydrogen or a protecting group and L is a leaving group, with an amine of formula (XI):

$$HNP^{2}CR^{3}R^{4}(CH_{2})_{m}O(CH_{2})_{n}$$

$$(CR^{a}R^{b})_{x}$$

$$(CR^{a}R^{b})_{y}$$

$$(CR^{a}R^{b})_{y}$$

$$(XI)$$

wherein R<sup>a</sup>, R<sup>b</sup>, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, m, n, x, y and z are as defined; and P<sup>2</sup> represents hydrogen or a protecting group;

wherein said reacting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

- (i) removing any protecting groups;
- (ii) separating an enantiomer from a mixture of enantiomers;
- (iii) converting one compound of formula (I) to a different compound of formula (I); and
- (iv) converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.

18. (New) The method according to claim 10, wherein the mammal is a human.

- 19. (New) The process according to Claim 16, wherein L is a halo or sulfonate leaving group.
- 20. (New) The process according to Claim 19, wherein L is selected from the group consisting of an alkylsulfonate, an aryl sulfonate, and a haloalkylsulfonate.
- 21. (New) The process according to Claim 17, wherein L is a halo or sulfonate leaving group.
- 22. (New) The process according to Claim 21, wherein L is selected from the group consisting of an alkylsulfonate, an aryl sulfonate, and a haloalkylsulfonate.